US007584568B1

(12) **United States Patent**
**Brownlee**

(10) **Patent No.: US 7,584,568 B1**
(45) **Date of Patent: Sep. 8, 2009**

(54) **COLLAPSIBLE FIREARM SUPPORT**

(76) Inventor: **Walter L. Brownlee**, 1110 First Ave. SE., Watertown, SD (US) 57201

( * ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **11/649,556**

(22) Filed: **Jan. 4, 2007**

(51) **Int. Cl.**
***F41C 27/00*** (2006.01)

(52) **U.S. Cl.** ..... **42/94**; 89/37.01

(58) **Field of Classification Search** ..... 42/94; 89/37.01
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

| | | | | |
|---|---|---|---|---|
| 713,114 | A | | 11/1902 | La Force |
| 721,425 | A | | 2/1903 | Clyde |
| 1,184,078 | A | | 5/1916 | Cooke |
| 1,593,415 | A | | 7/1926 | Perkins |
| 1,786,308 | A | * | 12/1930 | Latourelle et al. ..... 248/155 |
| 2,498,749 | A | | 2/1950 | Benson |
| 2,826,848 | A | | 3/1958 | Davies |
| 2,844,905 | A | * | 7/1958 | Musser et al. ..... 42/94 |
| 3,233,517 | A | | 2/1966 | Morrison |
| 3,313,505 | A | * | 4/1967 | Petrie ..... 42/94 |
| 3,445,082 | A | * | 5/1969 | Frazer et al.. ..... 42/94 |
| 3,618,885 | A | | 11/1971 | Muller |
| 3,632,073 | A | | 1/1972 | Nakatani |
| 3,703,046 | A | * | 11/1972 | Barone et al. ..... 42/94 |
| 3,804,355 | A | | 4/1974 | Uroshevich |
| 4,010,922 | A | | 3/1977 | Heller et al. |
| 4,121,799 | A | | 10/1978 | Michio |
| 4,215,839 | A | | 8/1980 | Gibran |
| 4,265,045 | A | * | 5/1981 | Garbini ..... 42/94 |
| 4,317,552 | A | | 3/1982 | Weidler |
| 4,455,005 | A | | 6/1984 | Mooney |
| D276,621 | S | | 12/1984 | Hanke |
| 4,545,660 | A | | 10/1985 | Rudolf |
| 4,575,964 | A | | 3/1986 | Griffin |
| 4,580,483 | A | | 4/1986 | Garbini |
| 4,583,958 | A | | 4/1986 | Matsuda |
| 4,695,022 | A | | 9/1987 | Mendonsa et al. |
| 4,915,332 | A | | 4/1990 | Ouellette |
| 4,974,802 | A | | 12/1990 | Hendren |
| 5,029,407 | A | | 7/1991 | Kirkpatrick |
| 5,048,215 | A | | 9/1991 | Davis |
| 5,074,188 | A | | 12/1991 | Harris |
| 5,081,782 | A | | 1/1992 | Wright |
| 5,082,222 | A | | 1/1992 | Hsu |
| 5,142,806 | A | | 9/1992 | Swan |

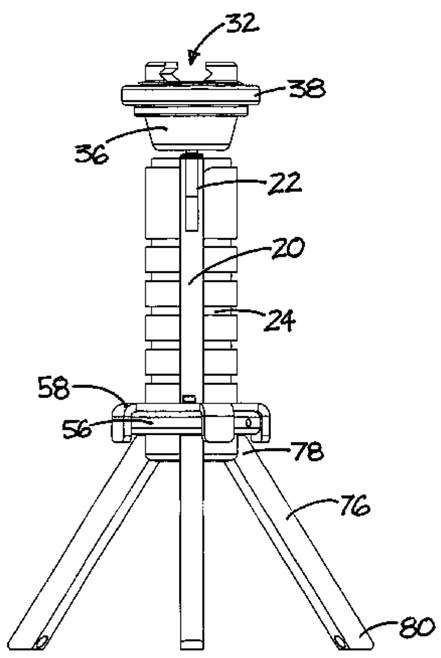
(Continued)

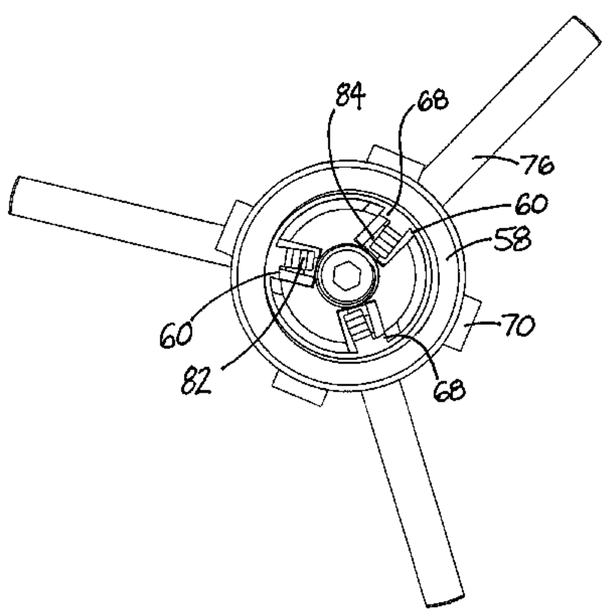
*Primary Examiner*—Michael Carone
*Assistant Examiner*—Jonathan C Weber
(74) *Attorney, Agent, or Firm*—Jeffrey A. Proehl; Woods, Fuller, Shultz & Smith, P.C.

(57) **ABSTRACT**

A collapsible firearm support for supporting a firearm above a support surface is disclosed, and includes an elongate stanchion having an upper end and a lower end, a mount mounted on the stanchion and configured to mount to a firearm, and a leg assembly mounted on the stanchion. The leg assembly includes a plurality of legs, with each leg being pivotable between a stored position in which the leg is oriented substantially parallel to a longitudinal axis of the stanchion and a deployed position in which the leg is oriented at an angle to the longitudinal axis of the stanchion. The leg assembly is slidably movable with respect to the stanchion between the upper end and the lower end of the stanchion to adjust a vertical height of the upper end of the stanchion above a support surface when the leg assembly is rested on the support surface.

**24 Claims, 10 Drawing Sheets**



U.S. PATENT DOCUMENTS

| | | | | |
|---|---|---|---|---|
| D335,889 | S | 5/1993 | Gibran | |
| 5,310,145 | A | 5/1994 | Chen | |
| 5,345,706 | A | 9/1994 | Brown | |
| 5,354,024 | A | 10/1994 | Vinghog et al. | |
| 5,402,595 | A | 4/1995 | Tamllos | |
| 5,410,835 | A | 5/1995 | Vetter | |
| 5,417,002 | A | 5/1995 | Guerra | |
| 5,438,786 | A | 8/1995 | Hilderbrand | |
| 5,584,137 | A | 12/1996 | Teetzel | |
| 5,611,509 | A | 3/1997 | Kulp et al. | |
| 5,628,135 | A | 5/1997 | Cady | |
| 5,692,719 | A | 12/1997 | Shepherd | |
| 5,694,712 | A | 12/1997 | Plonka | |
| 5,713,553 | A | 2/1998 | Cooper | |
| 5,758,448 | A | 6/1998 | Thummel | |
| 5,806,228 | A | 9/1998 | Martel et al. | |
| 5,913,668 | A * | 6/1999 | Messer | 42/94 |
| 5,937,560 | A | 8/1999 | Beltz | |
| 5,946,842 | A | 9/1999 | Nyzell et al. | |
| 6,007,032 | A | 12/1999 | Kuo | |
| 6,055,760 | A | 5/2000 | Cuson et al. | |
| 6,192,908 | B1 | 2/2001 | Smith | |
| 6,283,421 | B1 | 9/2001 | Eason et al. | |
| 6,315,251 | B1 | 11/2001 | Stoudt et al. | |
| 6,315,256 | B1 | 11/2001 | Tolar | |
| 6,487,807 | B1 * | 12/2002 | Kopman et al. | 42/94 |
| 7,111,424 | B1 * | 9/2006 | Moody et al. | 42/72 |

* cited by examiner

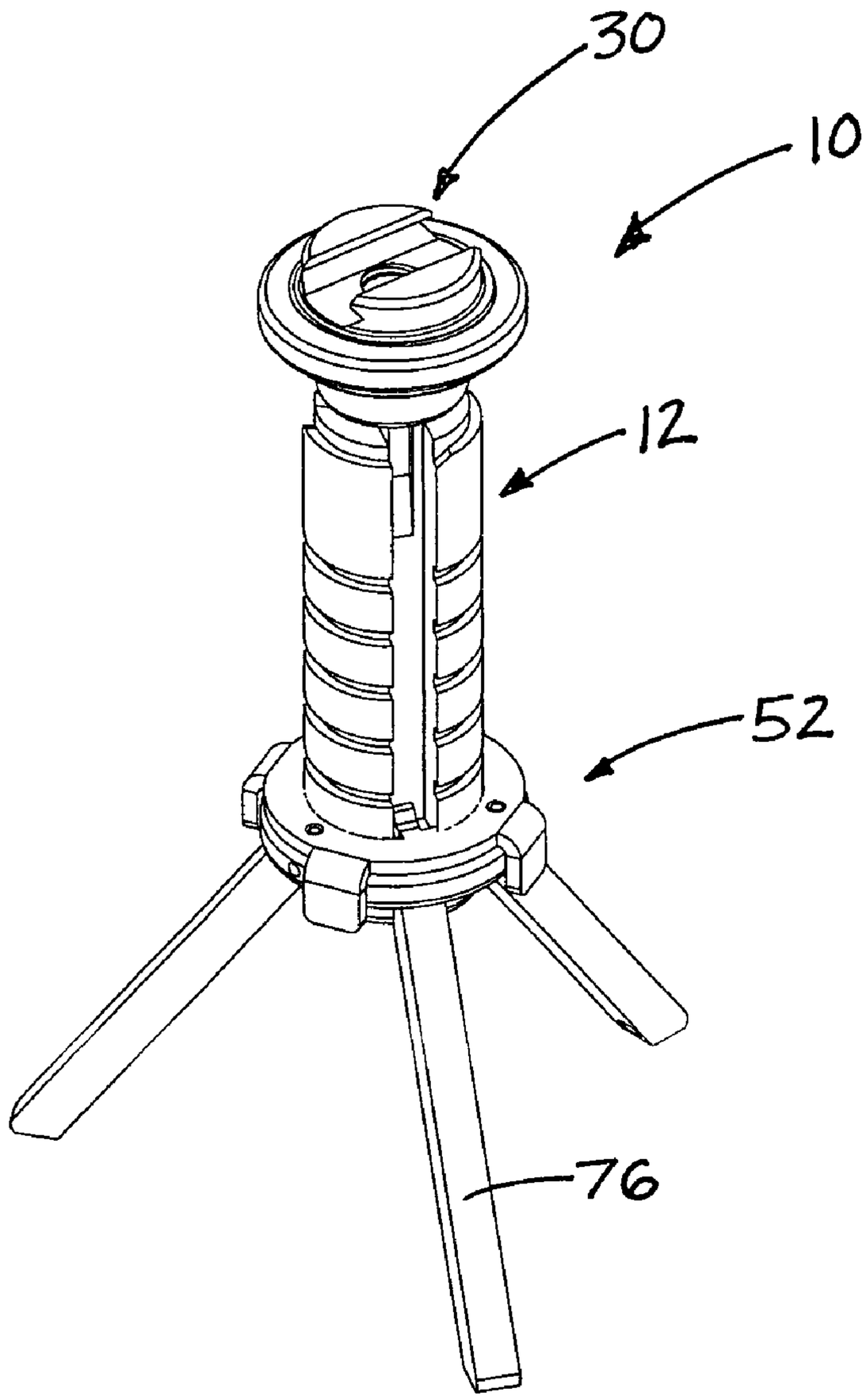



FIG. 1

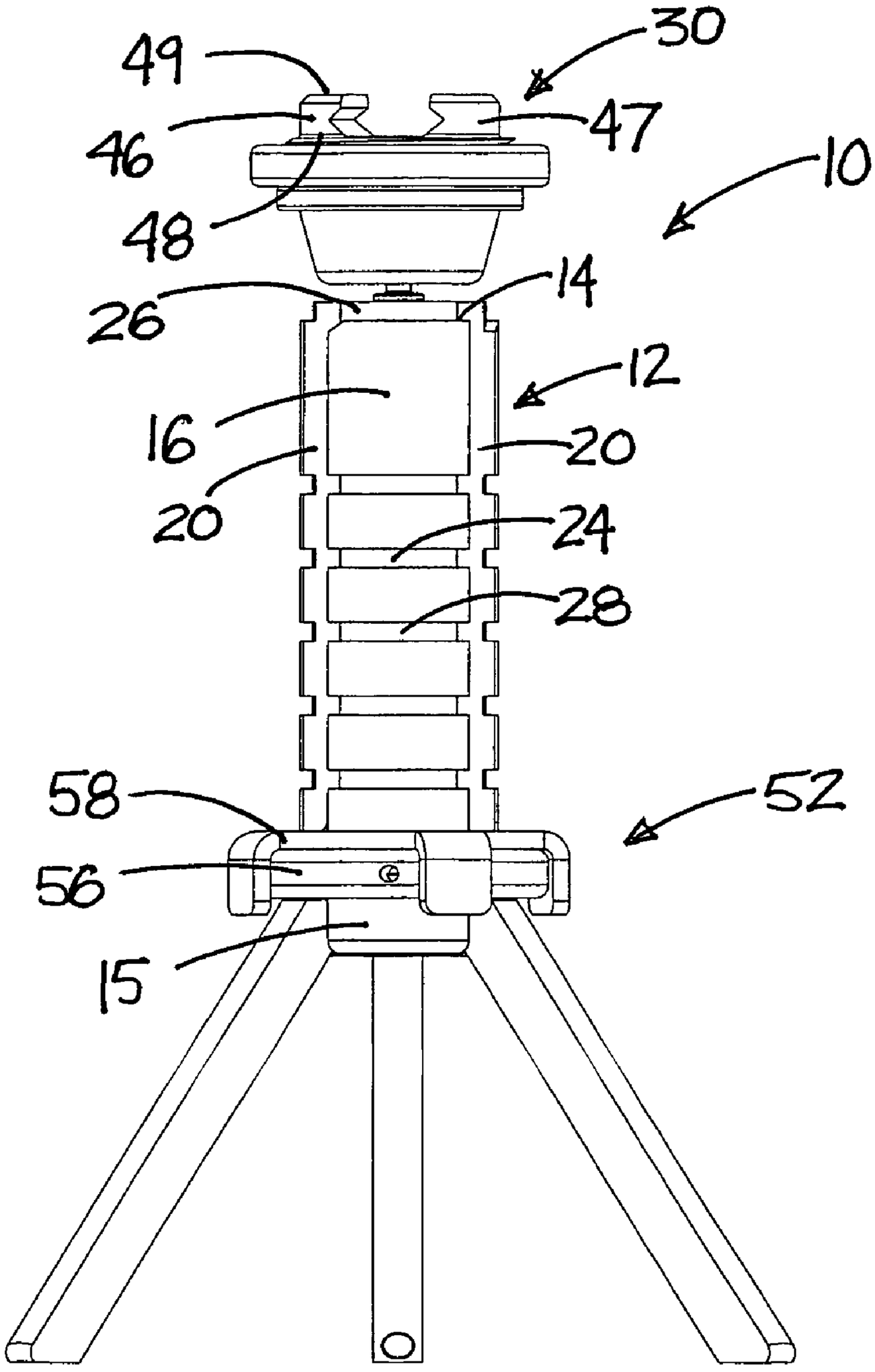



FIG. 2

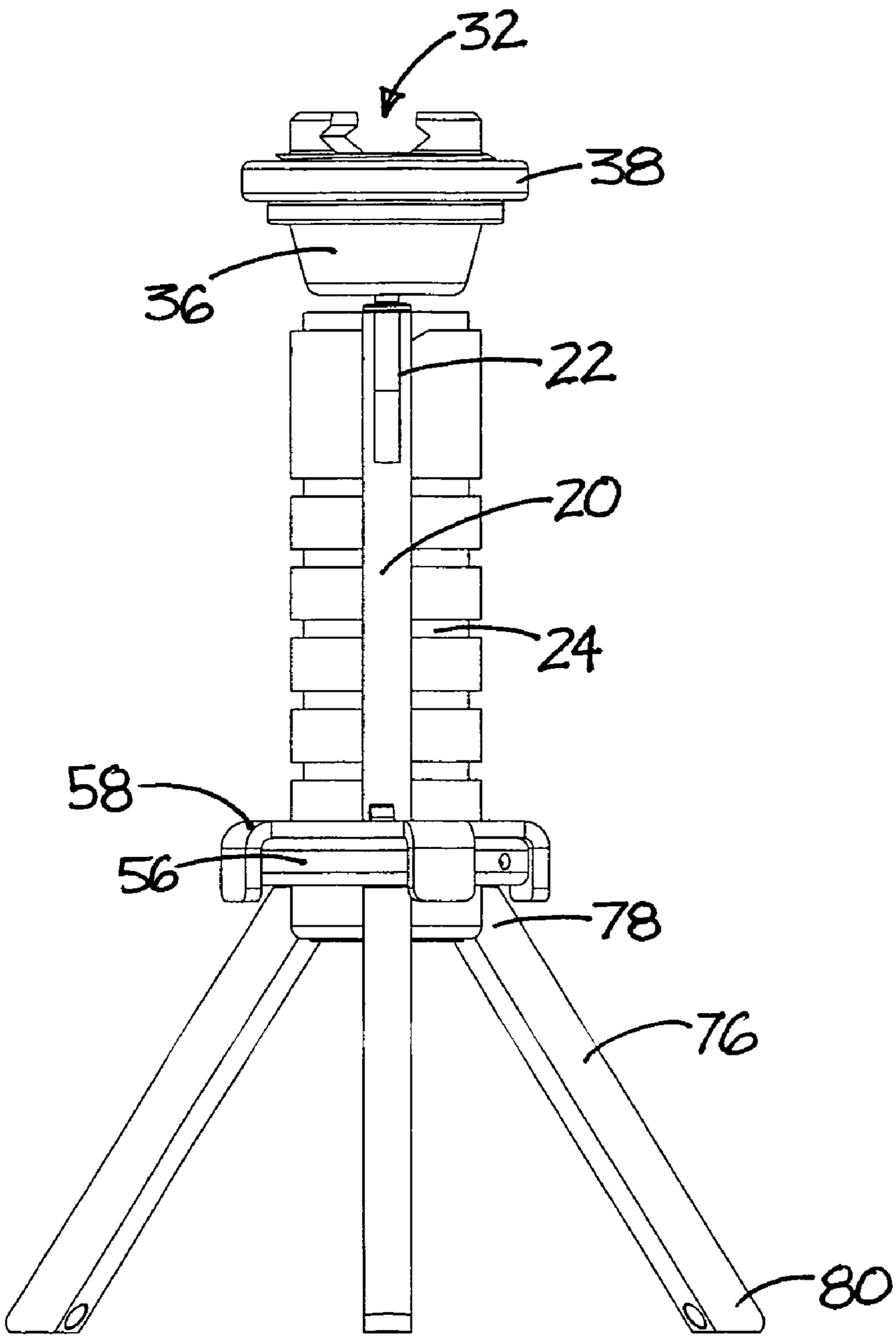



FIG. 3

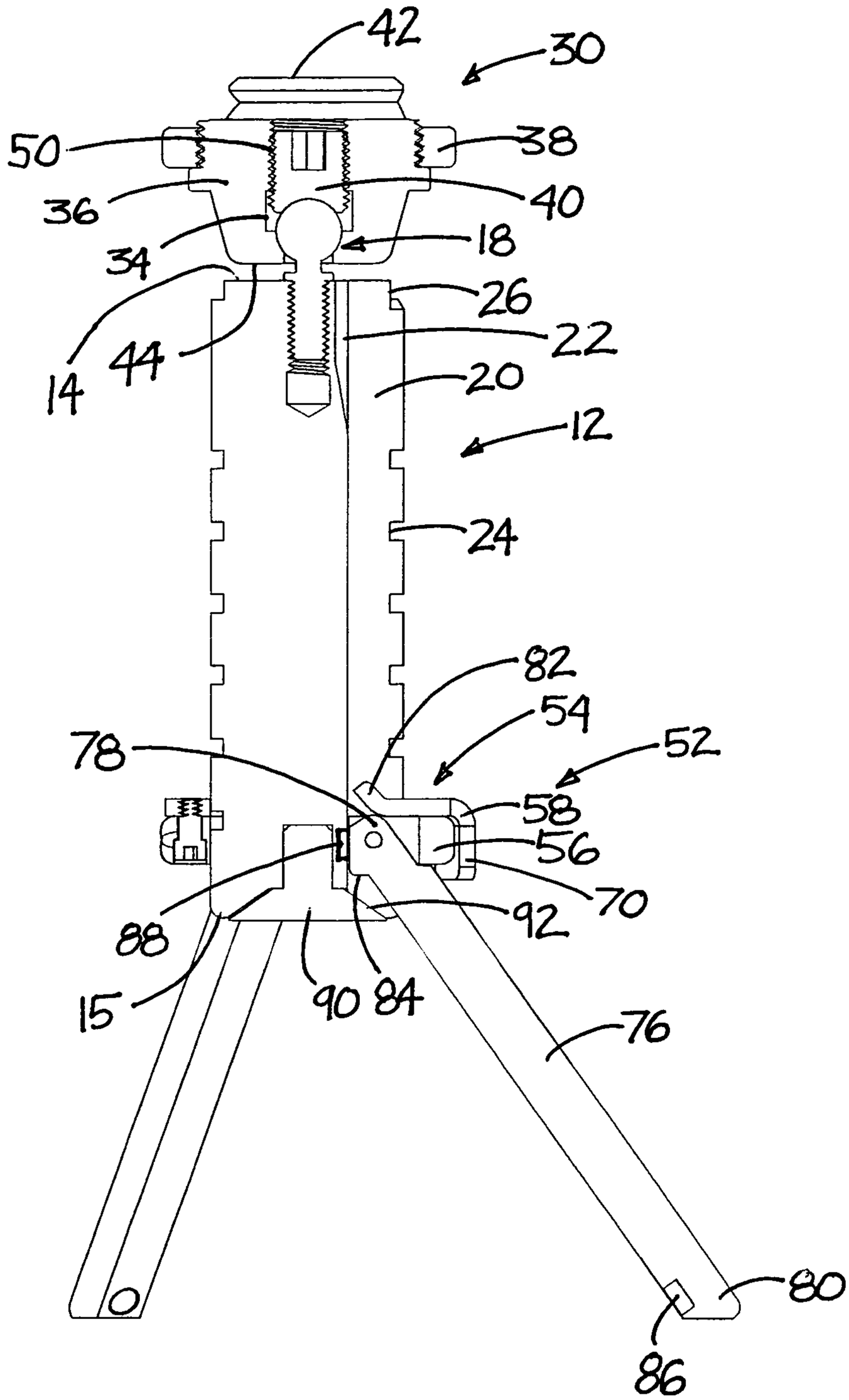

42
30
50
38
36
40
34
18
26
14
44
22
20
12
24
82
54
52
78
58
56
70
88
92
15
90
84
76
80
86

FIG. 4

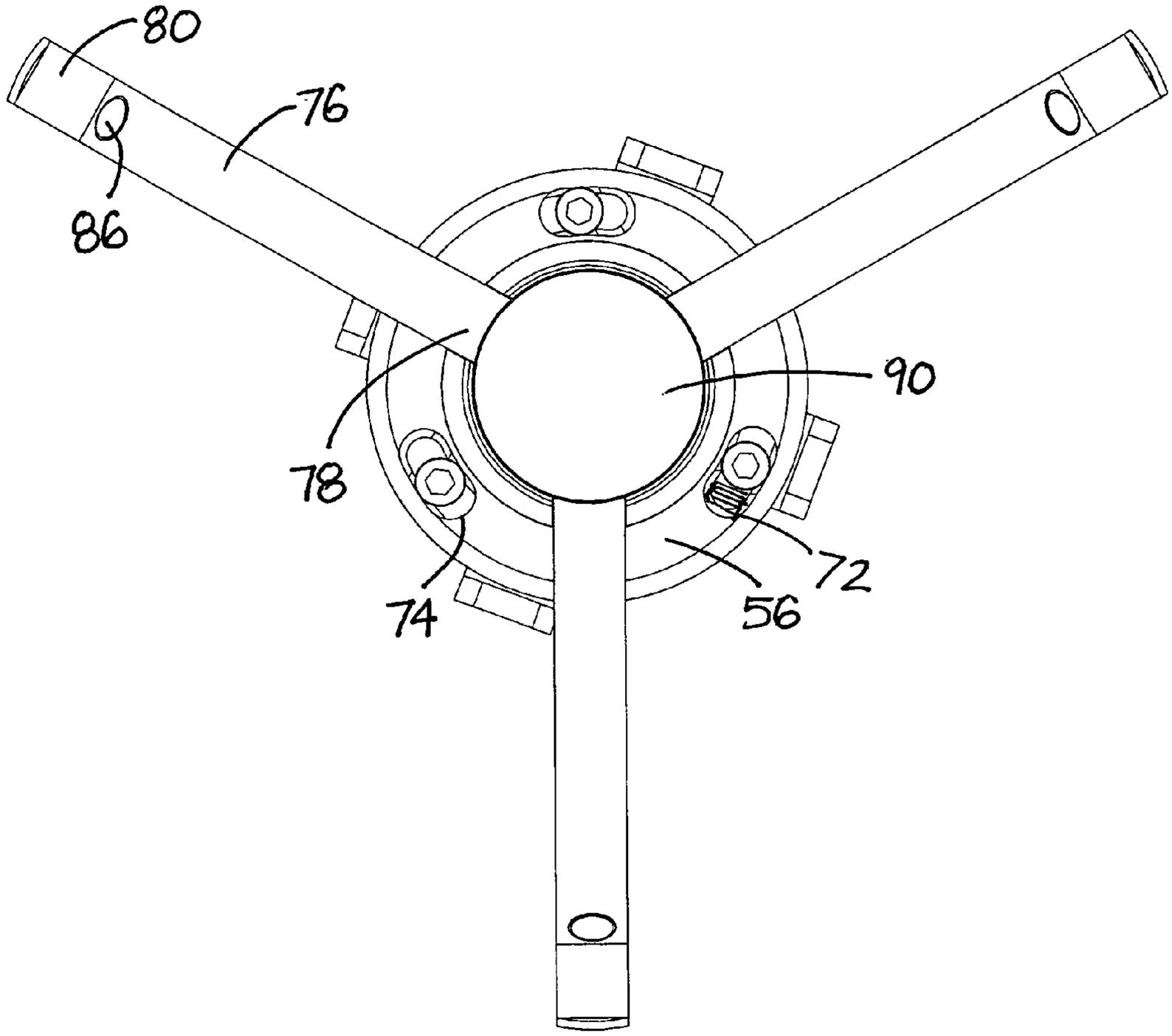



FIG. 5

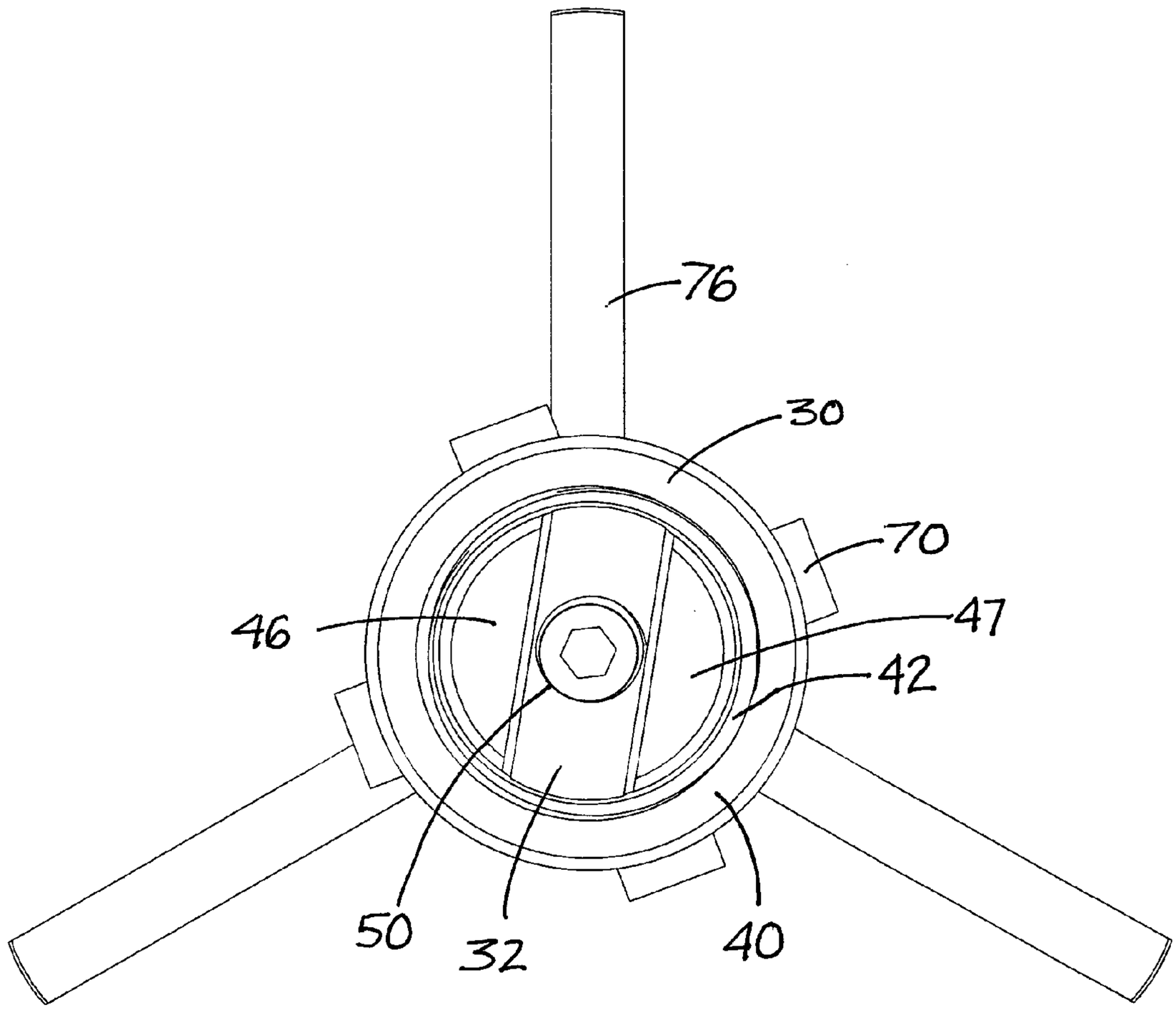



FIG. 6

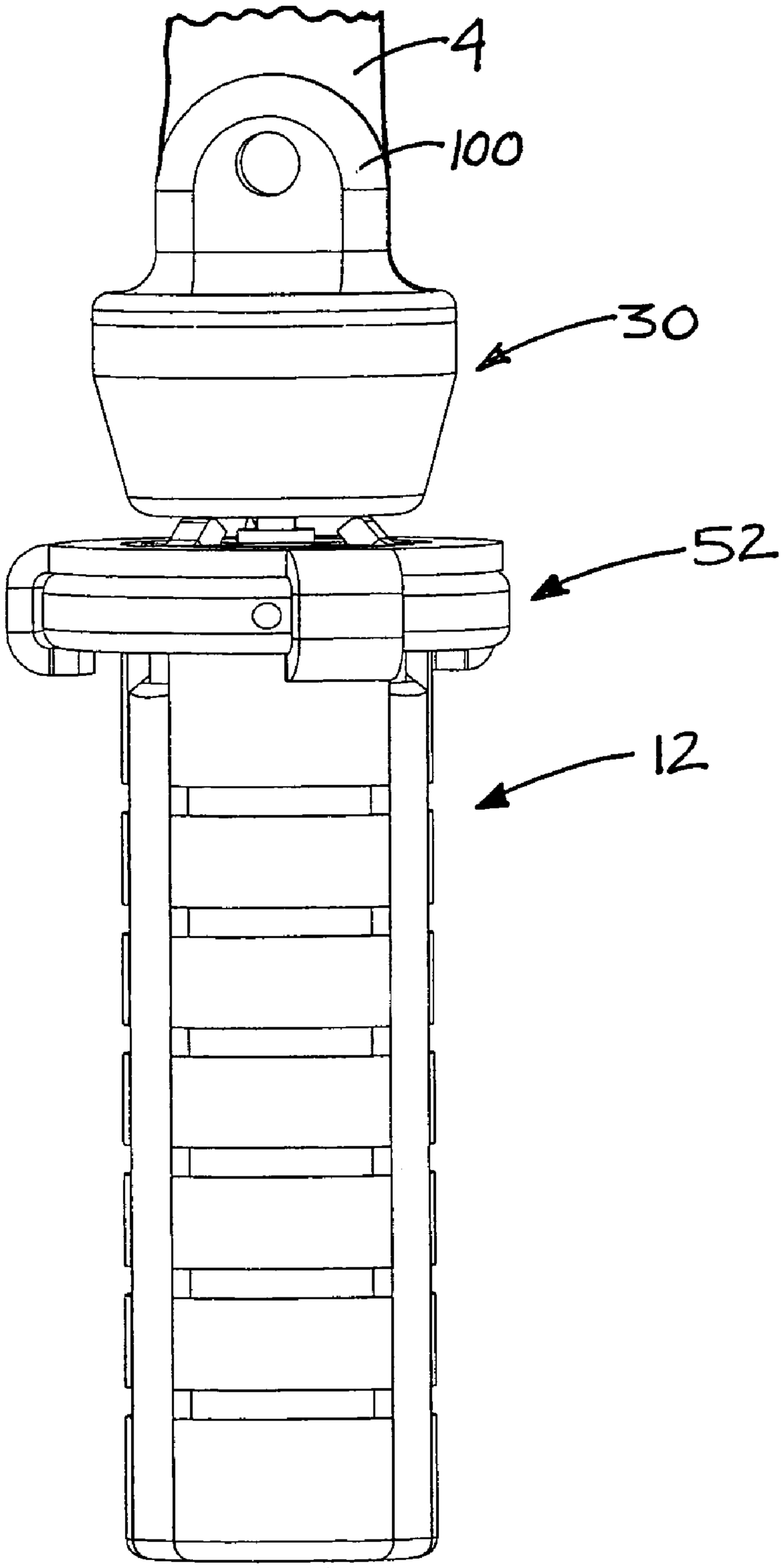



FIG. 7

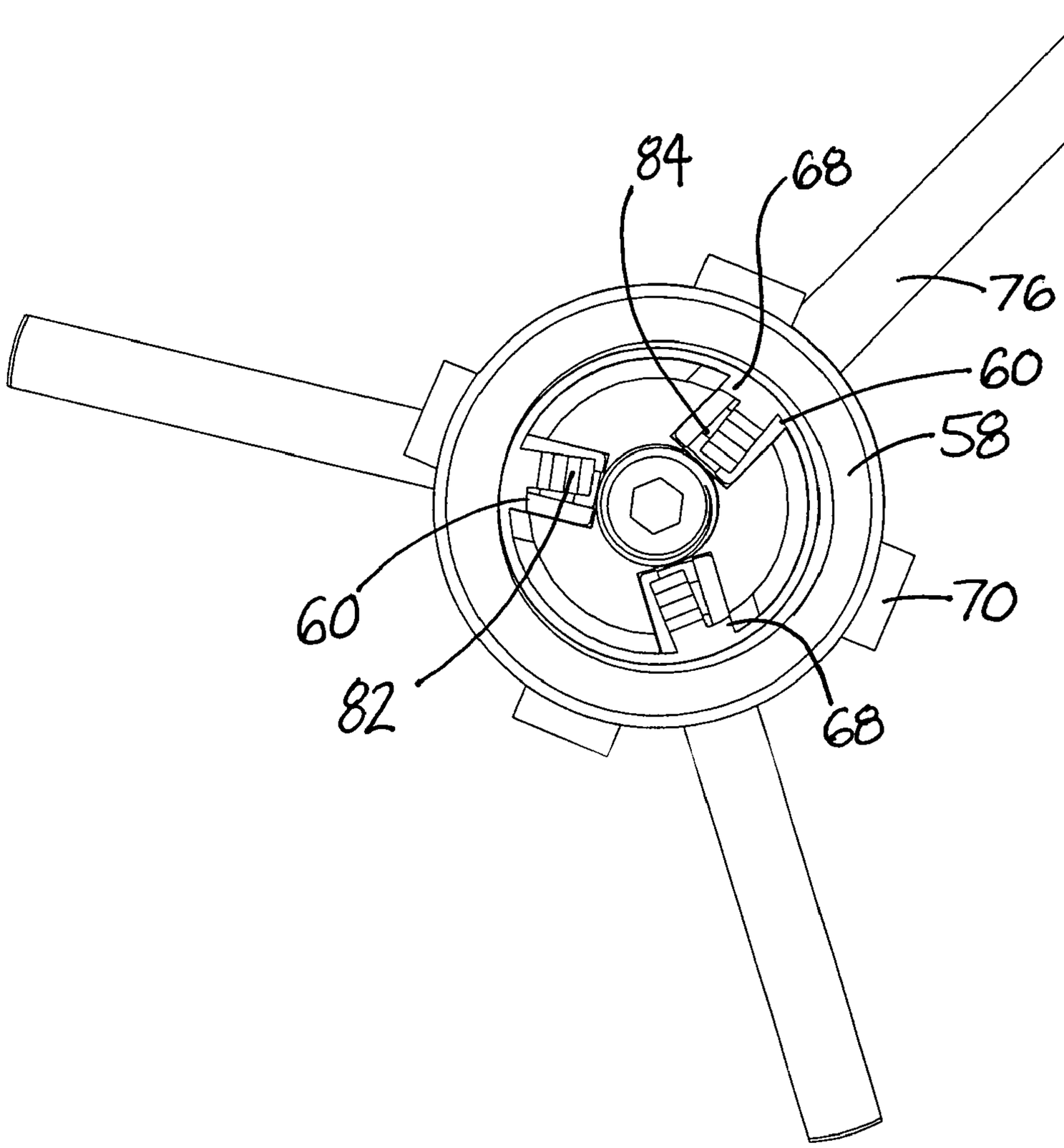



FIG. 8

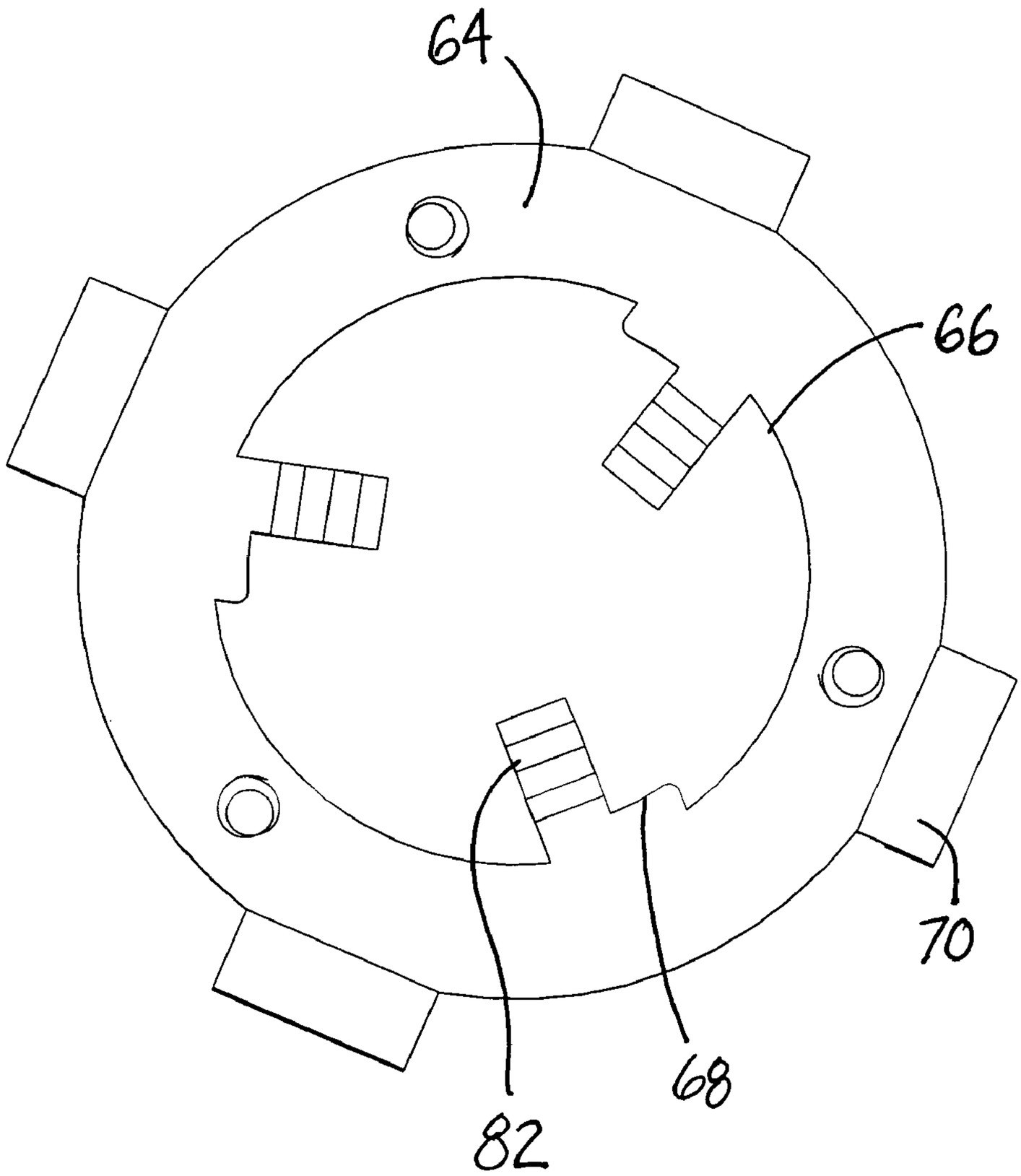



FIG. 9

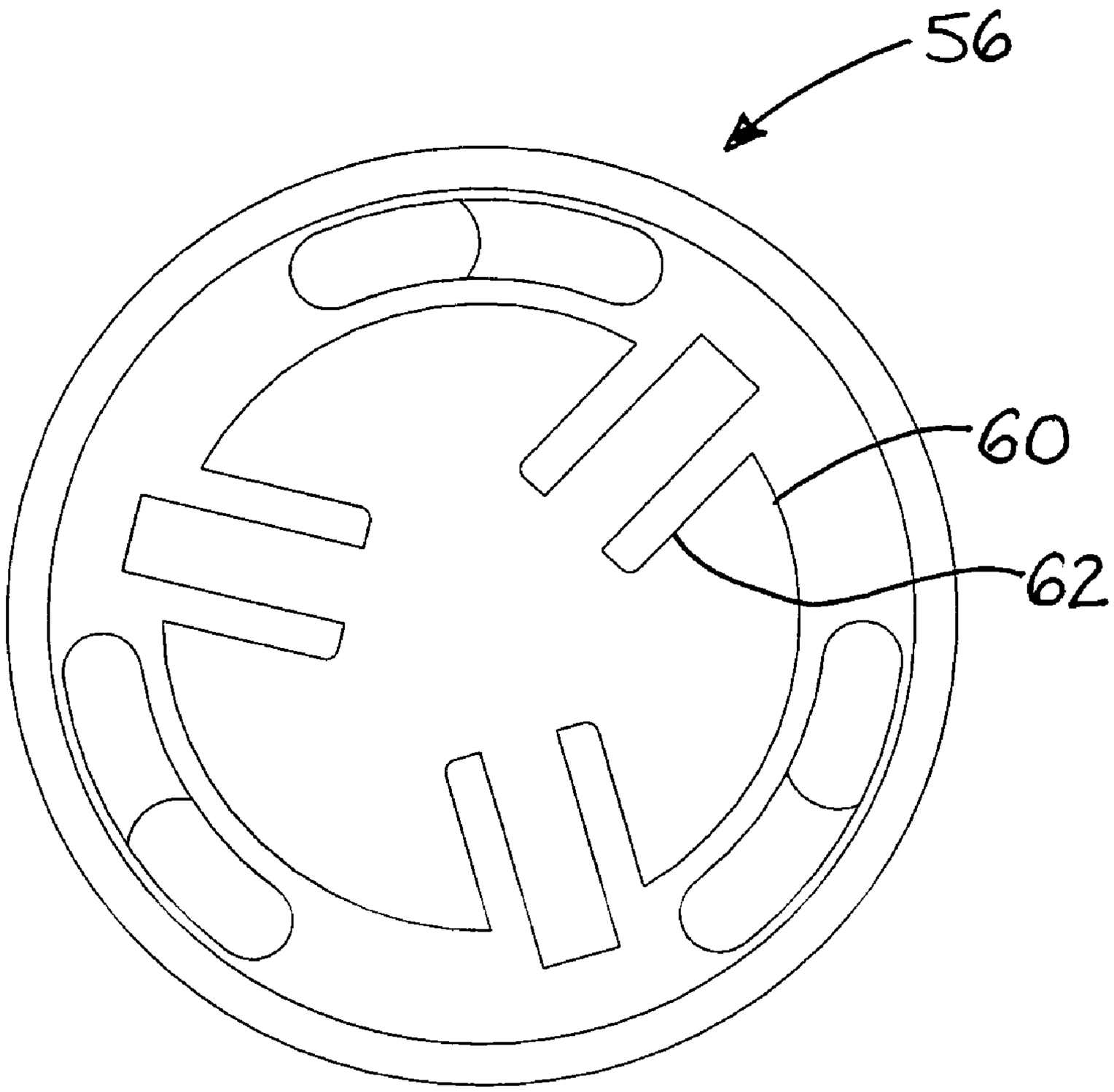



FIG. 10

# COLLAPSIBLE FIREARM SUPPORT

## BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to firearm accessories and more particularly pertains to a new collapsible firearm support for supporting a firearm on a surface at a user-adjustable height.

2. Description of the Prior Art

The use of supports for firearms is generally known in the prior art. For example, the tripod gun handle disclosed in U.S. Pat. No. 6,487,807, of which I am a co-inventor, includes many useful features but lacks some features that could result in a more useful device. For example, the tripod gun handle described in the '807 patent does not allow for any significant height adjustment between the surface on which the tripod gun handle is rested and the gun that is being supported. The gun handle thus supports the gun at only one elevation above the surface, which does not provide the user with the ability to set the optimal height for the user's preferences and the particular conditions of use of the handle.

In these respects, the collapsible firearm support according to the present invention provides many of the features of the aforedescribed devices as well as providing additional features, such as height adjustment.

## SUMMARY OF THE INVENTION

In view of the foregoing limitations in the known firearm accessories present in the prior art, the present invention provides a new collapsible firearm support wherein the same can be utilized for supporting a firearm on a surface at a user-adjustable height.

To attain this, the present invention generally comprises a collapsible firearm support for supporting a firearm above a support surface. The firearm support may comprise an elongate stanchion having an upper end and a lower end. The firearm support further includes a mount mounted on the stanchion and configured to mount to a firearm. The support further includes a leg assembly mounted on the stanchion, with the leg assembly including a plurality of legs, and each leg is pivotable between a stored position in which the leg is oriented substantially parallel to a longitudinal axis of the stanchion and a deployed position in which the leg is oriented at an angle to the longitudinal axis of the stanchion. The leg assembly is slidably movable with respect to the stanchion between the upper end and the lower end of the stanchion to adjust a vertical height of the upper end of the stanchion above a support surface when the leg assembly is rested on the support surface.

There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto.

In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to



be understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be utilized as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions insofar as they do not depart from the spirit and scope of the present invention.

One significant advantage of the present invention is the capability to adjust the height that the collapsible firearm support supports the firearm above a surface with a positive locking structure, while permitting rotational movement and swivel movement of the firearm.

Further advantages of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure. For a better understanding of the invention, its operating advantages and the specific objects attained by its uses, reference should be made to the accompanying drawings and descriptive matter in which there are illustrated preferred embodiments of the invention.

## BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be better understood and objects of the invention will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

FIG. **1** is a schematic perspective view of a new collapsible firearm support according to the present invention.

FIG. **2** is a schematic side view of the present invention.

FIG. **3** is a schematic side view of the present invention shown rotated from the position in FIG. **2**.

FIG. **4** is a schematic sectional view of the present invention with the section taken along a plane including a central longitudinal axis of the firearm support.

FIG. **5** is a schematic bottom view of the present invention.

FIG. **6** is a schematic sectional view of the present invention with the section taken along a plane oriented perpendicular to the central longitudinal axis of the firearm support.

FIG. **7** is a schematic side view of the present invention showing the leg assembly in the stored position, and also showing an optional mount configuration.

FIG. **8** is a schematic top view of the present invention shown with the mount removed to reveal detail of the stanchion and the leg assembly.

FIG. **9** is a schematic top view of the lock member isolated from other components of the present invention.

FIG. **10** is a schematic top view of the support member isolated from other components of the present invention.

## DESCRIPTION OF PREFERRED EMBODIMENTS

With reference now to the drawings, and in particular to FIGS. **1** through **10** thereof, a new collapsible firearm support embodying the principles and concepts of the present invention and generally designated by the reference numeral **10** will be described.

The collapsible firearm support **10** of the invention may generally include a stanchion **12**, a mount **30** for mounting the stanchion **12** to the firearm, and a leg assembly **52** mounted on the stanchion.

In general, the leg assembly **52** is movable with respect to the stanchion **12**, and the leg assembly is movable between a stored position (see FIG. **7**) and a deployed position (see FIG. **1**). The stored position of the leg assembly **52** is characterized by the legs **76** being positioned in a stored orientation with the legs nested in the guide grooves **20** and the deployed position of the leg assembly is characterized by the legs being positioned in a deployed orientation with the legs inclined outwardly from the stanchion **12**. In the stored position of the leg assembly **52**, the leg support **54** is positioned in the primary positioning groove **26** and in the deployed position, the leg support **54** is positioned in one of the secondary positioning grooves **28**.

In greater detail, the stanchion **12** of the collapsible firearm support **10** may be elongate with an upper end **14** and a lower end **15**, with an outer surface **16**. For the purposes of this description, the terms "inward" and "inboard" will be used to refer to the direction toward the central longitudinal axis of the stanchion **12** and the terms "outward" and "outboard" will be used to refer to the direction away from the central longitudinal axis of the stanchion **12**.

The stanchion **12** may include a swivel mount portion **18** for engaging the mount **30** which is further described below. The swivel mount portion **18** may be located toward the upper end **14** of the stanchion, and may have an outer surface at least a portion of which is substantially spherical.

The outer surface **16** of the stanchion **12** may be generally cylindrical, although this is not critical to the invention. The outer surface **16** of the stanchion **12** may also include at least one guide groove **20** that may extend substantially parallel to the longitudinal axis of the stanchion. The guide groove **20** may extend between the upper **14** and lower **15** ends of the stanchion. In some preferred embodiments of the invention, the outer surface **16** includes a plurality of the guide grooves **20**. The plurality of guide grooves **20** generally corresponds to the number of legs **76** that are present on the firearm support **10**, and illustratively includes three of the guide grooves (for a tripod lag arrangement) but may also include four or more grooves **20**. The plural guide grooves **20** may be substantially uniformly spaced from each other about a perimeter of the outer surface **16** of the stanchion **12**.

The outer surface **16** of the stanchion **12** may also include a deploying groove **22** that is positioned in at least one of, and preferably in all of, the guide grooves **20**. The deploying groove **22** is located in an interior surface of the associated guide groove **20**, and receives the deploying tab **84** of one of the legs **76**, which is described below.

The outer surface **16** may also include at least one positioning groove **24**, and illustratively includes a plurality of positioning grooves **24** that are spaced from each other along the length of the stanchion **12**. The positioning groove **24** may comprise an annular groove that extends about the stanchion **12**, although the positioning grooves may not be continuous about the stanchion, but may comprise, for example, a plurality of segments. The annular positioning groove **24**, or the segments of the same positioning groove **24**, may be located in a plane oriented substantially perpendicular to a longitudinal axis of the stanchion **12**. The plurality of positioning grooves **24** may include a primary positioning groove **26** that is associated with the stored position of the leg assembly **52**. The primary positioning groove **26** may be located toward or at the upper end **14** of the stanchion **12**. The plurality of positioning grooves **24** may also include at least one secondary positioning groove **28** that is associated with the deployed position of the leg assembly **52**. Each of the secondary positioning grooves **28** may be associated with a deployed position of the leg assembly **52** at a different height of the mount **30** above a surface on which the leg assembly is rested. The secondary positioning grooves may be located between the primary positioning groove **26** and the lower end **15** of the stanchion **12**.



The mount **30** of the firearm support **10** is mounted on the stanchion **12**, and may be rotatable with respect to the stanchion **12**. The mount **30** may also be swivelable with respect to the stanchion **12**. The mount **30** may be located on the upper end **14** of the stanchion **12**. The mount **30** may define a receiver channel **32** for receiving the mounting structure **2** of the firearm **1**. The rotation of the mount **30** with respect to the stanchion **12** provides adjustment of the orientation of the receiver channel **32** (and a firearm positioned thereon) with respect to the stanchion **12**. The swivelability of the mount **30** with respect to the stanchion **12** provides swivelability of the stanchion **12** with respect to the firearm when the firearm is mounted on the receiver channel. The mount **30** may also define a cavity **34** that receives the swivel mount portion **18** of the stanchion **12**.

The mount **30** of the firearm support **10** may comprise a mount assembly, and the mount assembly may comprise a primary member **36** that defines the cavity **34**, an abutment ring **38** for selectively securing the firearm in the receiver channel **32**, and a pressure member **40** for applying an adjustable amount of pressure on the swivel mount portion **18** of the stanchion located in the cavity **34**. The primary member **36** has a top **42** and a bottom **44**, and the cavity **34** is formed in the bottom **44** of the primary member. The receiver channel **32** is located on the top **42** of the primary member **36**. Illustratively, the primary member **36** may include a pair of grip structures **46**, **47** that are positioned in opposition to each other and spaced apart, with the receiver channel **32** being located between the grip structures. Each of the grip structures **46**, **47** may have a base end **48** and a free end **49**. The grip structures **46**, **47** define a channel width therebetween. The channel width may be relatively larger at a central location between the respective free ends **48** and the respective base ends **49** than at the free ends **48** and the base ends **49**.

The abutment ring **38** of the mount **30** may be configured to selectively apply pressure to a firearm positioned in the receiver channel **32** to resist sliding of the mount **30** with respect to the firearm. In the illustrative embodiment, the abutment ring **38** may be rotatably mounted on the primary member **36**, although other manner for mounting the abutment ring on the primary member may be employed. The abutment ring **38** may include threads that engage threads formed on the outer surface of the primary member **36** such that rotation of the abutment ring in a first direction moves the abutment ring toward the receiver channel **32** and rotation of the abutment ring in a second direction moves the abutment ring away from the receiver channel.

The pressure member **40** of the mount **30** may be mounted on a passage **50** formed in the primary member **36**. The pressure member **40** includes threads that engages threads formed on the passage of the primary member **36** such that rotation of the pressure member **40** in a first direction moves the pressure member toward the swivel mount portion **18** of the stanchion **12** and rotation of the pressure member in a second direction moves the pressure member away from the swivel mount portion of the stanchion.

Optionally, as shown in FIG. **7**, the mount may comprise an upstanding ear **100** that connects to a mounting ear **4** of a firearm that is so equipped.

The leg assembly **52** of the firearm support **10** provides a support structure for the stanchion **12**, and in turn the firearm when attached, that is movable with respect to the stanchion a stored position, in which the legs **76** are substantially

retracted with respect to the stanchion, and a deployed position, in which the legs **76** extended with respect to the stanchion and may be splayed away from the stanchion. In the most preferred embodiments of the invention, the leg assembly **52** may be placed in the deployed position at least two degrees of extension of the leg assembly **52**, to thereby set the height of the supported position of the firearm.

In greater detail, the leg assembly **52** may comprise a leg support **54**, and the leg support may be movable along at least a portion of the stanchion **12**. The leg support **54** may be slidable along at least a portion of the length of the stanchion **12** between the upper **14** and lower **15** ends. The leg support **54** may comprise a support member **56** and a lock member **58**. The support member **56** may define an aperture **60** that receives a portion of the stanchion **12**, and permits sliding of the support member with respect to the stanchion. The support member **56** may include a guide tab **62** that extends into the aperture **60**, and further extends into the guide groove **20** of the stanchion **12** to resist rotation of the support member with respect to the stanchion. In some embodiments, the number of guide tabs **62** that are mounted on the support member **56** corresponds to the number of guide grooves **20** that are formed on the stanchion **12**, so that a guide tab of the support member **56** is positioned in each of the guide grooves.

The lock member **58** is provided for releasably locking the support member **56** in a selected position on the stanchion **12**. The lock member **58** may be mounted on the support member **56**, and may be rotatable with respect to the support member. The lock member **58** may have a locking position (see FIG. **7**) and a releasing position. The lock member **58** may be rotated with respect to the support member **56** between the locking position and the releasing position. Illustratively, the lock member **58** may be positioned above the support member **56**. The lock member **58** may comprise a body portion **64** which may define an aperture **66** that receives a portion of the stanchion **12**. The lock member **58** may further comprise a lock tab portion **68** for engaging one of the positioning grooves on the stanchion **12**. The lock tab portion **68** may be located on the body portion **64**. The lock tab portion **68** may extend inwardly from the body portion **64**, and may extend into the aperture **66** defined by the body portion. In some embodiments, the number of lock tab portions **68** that are mounted on the body portion **64** corresponds to the number of guide grooves **60** that are formed on the stanchion **12**, so that a lock tab portion of the lock member **58** is positioned in each of the guide grooves for selectively engaging one of the positioning grooves.

The lock member **58** may further comprise a positioning tab portion **70** for positioning the lock member **58** with respect to the support member **56**. The positioning tab portion **70** may extend outwardly from the body portion **64**, and may further extend downwardly with respect to the body portion, so that the positioning tab portion **70** is positioned adjacent to the support member **56**. The lock member **58** may include two or more positioning tab portions **70** which are spaced about the outer perimeter of the body portion to position the lock member **58** with respect to the support member such that the aperture **60** and the aperture **66** are substantially axially aligned.

As a preferred option, the lock member **58** may feature one or more abutting tabs **82** for holding the mount **30** in a position when the leg assembly **52** is in the stored position and the leg **76** is in the retracted position. The abutting tabs **82** may each extend into one of the guide grooves **20** of the stanchion **12** from the lock member **58**, and may thus extend inwardly from the body portion **64** into the aperture **66** in the body member The abutting tab **82** may extend beyond the upper end **14** of the stanchion **12** when the leg **76** is in the retracted position, so that the tab or tabs **82** contact the bottom **44** of the mount **30** and thereby restrict swivel movement of the mount.

The leg assembly **52** may further comprise structure for biasing the lock member **58** into the locking position and the lock tab portions **68** into engagement with one of the positioning grooves **24**. The biasing structure may comprise a spring **72** that bears or presses against the support member **56** and the lock member **58**. The spring **72** may bear against a structure mounted on the lock member **58**, such as, for example, a screw that is mounted on the lock member **58** and moves in a slot **74** formed in the support member **56**.

The leg assembly **52** further includes a plurality of legs **76** that are mounted on the leg support **54**. The plurality of legs **76** may be pivotable with respect to the leg support **54**. Each of the legs may have an inboard end **78** and an outboard end **80**, and the inboard end **78** may be pivotally mounted on the support member **56**. The legs **76** may be movable between a stored orientation (see, for example, FIG. **7**) and a deployed orientation (see, for example, FIG. **1**).

Each leg **76** may also include a deploying tab **84** for deploying the leg **76** when the leg assembly **52** is moved from the stored position to the deployed position. The deploying tab **84** may be located on an inward surface of the leg **76**, and may extend into the deploying groove **22** in the stanchion **12** when the leg is in the retracted position. The length of the deploying groove **22** may be such that any significant movement of the leg assembly **52** from the stored position toward the deployed position causes the deploying tab **84** to move out of the deploying groove **22** to thereby pivot the leg **76** with respect to the leg support **54**. In the illustrative embodiment, the deploying groove **22** tapers shallower toward the lower end **15** of the stanchion, so that the deploying tab **84** is accommodated in the deploying groove **22** when the leg assembly **54** is in the stored position, but is forced outwardly as the leg assembly is moved toward the lower end **15** of the stanchion and the deploying groove becomes shallower.

The leg assembly **52** may include a retainer magnet **86** on each leg **76**. The retainer magnet **86** may be positioned on an inward surface of the leg **76**, and may be positioned adjacent to a magnetically receptive material **88** mounted on the stanchion **12** when the leg **76** is in the retracted position. The magnet **86** may thus function to provide a biasing force for biasing the leg **76** toward the retracted position.

It will be noted that in some embodiments of the invention, each of the legs **76** is at least partially nestable in one of the guide grooves **20** of the stanchion **12**, and preferably the legs are each substantially fully nestable in the guide groove.

The firearm support **10** may further include a deploying structure **90** for moving the legs **76** toward the deployed orientation when the leg assembly **52** is moved from the stored position toward the deployed position. The deploying structure **90** may be mounted on the stanchion **12**, and may be positioned toward the lower end **15** of the stanchion **12**. The deploying structure **90** may have an inclined surface **92**. The inclined surface **92** may be inclined with respect to the central longitudinal axis of the stanchion **12**. The inclined surface may be in communication with each of the guide grooves **20** of the stanchion **12**.

In use, the user of the collapsible firearm support **10** may engage the support **10** in the collapsed condition by grasping the stanchion **12** or the mount **30** with one hand, and grasping the leg assembly **52** with the other hand, and the leg assembly may be rotated slightly to move the lock tab **68** of the lock member **58** out of primary positioning groove **24** and against the pressure of the spring **72**. The leg assembly **52** is then slid on the stanchion **12** toward the lower end **15** of the stanchion.

The deploying tab **84** on the each of the legs **76**, which are initially positioned in the deploying groove **22**, are forced out of the deploying groove by the movement of the leg assembly **52** relative to the stanchion **12**. The leg assembly **52** is moved along the stanchion **12** until the effective length of the stanchion and the leg assembly is at the desired height, and the nearest secondary positioning groove **28** is selected. The rotating force applied by the hand on the lock member **58** may be released so that the spring biases the lock tab **68** into the selected positioning groove **28**. Movement of the lack tab **68** into the positioning groove serves to resist movement of the leg assembly **52** with respect to the stanchion **12** until further rotational force is applied to the lag assembly and the lock member that releases the lock tab from the positioning groove.

With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art in light of the foregoing disclosure, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

I claim:

**1**. A collapsible firearm support for supporting a firearm above a support surface, the firearm support comprising:

an elongate stanchion having an upper end and a lower end, the stanchion having an outer surface;

a mount mounted on the stanchion and configured to mount to a firearm; and

a leg assembly mounted on the stanchion, the leg assembly including a plurality of legs, each leg being pivotable between a stored position in which the leg is oriented substantially parallel to a longitudinal axis of the stanchion and a deployed position in which the leg is oriented at an angle to the longitudinal axis of the stanchion;

wherein the leg assembly is slidably movable with respect to the stanchion along at least a portion of the outer surface between the upper end and the lower end of the stanchion to adjust a vertical height of the upper end of the stanchion above a support surface when the leg assembly is rested on the support surface;

wherein the stanchion includes a plurality of guide groove extending into the outer surface of the stanchion, each of the guide groove extending along the outer surface in an orientation substantially parallel to a longitudinal axis of the stanchion;

wherein each of the legs members is pivotable about a respective pivot on the leg assembly between a stored position and a deployed position each of the pivots of the legs members being slidable in one of the plurality of guide grooves.

**2**. The firearm support of claim **1** wherein the leg assembly is positionable and securable at least two discrete positions along the outer surface between the upper and lower ends of the stanchion.

**3**. The firearm support of claim **1** wherein the leg assembly is positionable and securable at least three discrete positions between the upper and lower ends of the stanchion.

**4**. The firearm support of claim **1** wherein a tab portion of the leg assembly extends into the one of the plurality of guide grooves such that sliding movement of the leg assembly is guided by the guide groove.

**5**. The firearm support of claim **4** wherein the stanchion includes at least two positioning grooves being positioned on the outer surface of the stanchion, each of the at least two positioning grooves being in communication with at least one of the plurality of guide grooves such that the tab portion of the leg assembly is selectively movable from the guide groove into the at least one positioning groove to lock the leg assembly at a discrete position on the stanchion corresponding to the positioning groove in which the tab portion is positioned.

**6**. The firearm support of claim **5** wherein the at least two positioning grooves extend about the stanchion and lies in a plane oriented substantially perpendicular to a longitudinal axis of the stanchion and substantially perpendicular to an axis of the at least one of the plurality of guide grooves.

**7**. The firearm support of claim **5** wherein each of the at least two positioning grooves are located at discrete and different positions along a length of the stanchion to provide a discrete and different position of the leg assembly on the stanchion.

**8**. The firearm support of claim **5** wherein the at least two positioning grooves includes:

a primary positioning groove associated with a stored position of the leg assembly; and

at least one secondary positioning groove associated with a deployed position of the leg assembly;

wherein the stored position and the deployed position are different positions.

**9**. The firearm support of claim **1** wherein the mount is rotatable with respect to the stanchion.

**10**. The firearm support of claim **1** wherein the mount is swivelable with respect to the stanchion.

**11**. The firearm support of claim **1** wherein the mount comprises a mount assembly including:

a primary member having a receiver channel formed therein for receiving a mounting portion of the firearm; and:

an abutment ring for selectively securing the firearm in the receiver channel, the abutment ring being configured to selectively apply pressure to the mounting portion of a firearm positioned in the receiver channel to resist sliding of the mount with respect to the firearm.

**12**. The firearm support of claim **11** wherein the abutment ring is rotatably mounted on the primary member and has an annular contact surface, the abutment ring including threads engaging threads formed on the primary member such that rotation of the abutment ring in a first direction moves the annular contact surface of the abutment ring toward the receiver channel and rotation of the abutment ring in a second direction moves the annular contact surface of the abutment ring away from the receiver channel.

**13**. The firearm support of claim **1** wherein the mount comprises a mount assembly including a primary member having a receiver channel formed therein for receiving a mounting portion of the firearm; and

wherein the primary member forms a cavity receiving a swivel mount portion of the stanchion at the upper end thereof, at least a portion of an exterior of the swivel mount portion of the stanchion being substantially spherical.

14. The firearm support of claim 1 wherein the leg assembly comprises:

a leg support slidably movable along at least a portion of the outer surface of the stanchion, the plurality of legs being pivotably mounted on the leg support such that the legs are pivotable with respect to the leg support and the stanchion.

15. The firearm support of claim 14 wherein at least one of the legs has an abutting tab located on the inboard end of the leg for holding the mount in a position when the leg is in a retracted position.

16. The firearm support of claim 14 additionally comprising a deploying structure mounted on the stanchion for moving the legs of the leg assembly toward a deployed orientation when the leg assembly is moved from a stored position toward a deployed position.

17. The firearm support of claim 1 wherein the leg support comprises:

a support member defining an aperture receiving a portion of the stanchion; and

a lock member configured to engage the outer surface of the stanchion to releaseably lock the support member in a position along the stanchion, the lock member being mounted on the support member.

18. The firearm support of claim 17 wherein the lock member is rotatable with respect to the support member, the lock member having a locking position and a releasing position.

19. The firearm support of claim 17 additionally comprising biasing means for biasing the lock member into the locking position with respect to the support member.

20. The firearm support of claim 17 wherein the lock member comprises:

a body portion defining an aperture receiving a portion of the stanchion; and

a lock tab portion for engaging a positioning groove on the stanchion.

21. The firearm support of claim 1 wherein at least one leg being at least partially nestable in the at least one guide groove of the stanchion.

22. The firearm support of claim 1 wherein the stanchion includes a deploying groove positioned in at least one of the guide grooves, the deploying groove being located in a interior surface of the associated guide groove; and

a deploying tab located on the leg and positioned to engage the deploying groove and the at least one guide groove such that the deploying tab pivots the leg outwardly from the outer surface of the stanchion when the leg assembly is moved along the outer surface of the stanchion from the stored position to the deployed position, the deploying tab being located on an inward surface of the leg.

23. A collapsible firearm support for supporting a firearm above a support surface, the firearm support comprising:

an elongate stanchion having an upper end and a lower end, the stanchion having an outer surface;

a mount mounted on the stanchion and configured to mount to a firearm; and

a leg assembly mounted on the stanchion, the leg assembly including a plurality of legs, each leg being pivotable between a stored position in which the leg is oriented substantially parallel to a longitudinal axis of the stanchion and a deployed position in which the leg is oriented at an angle to the longitudinal axis of the stanchion;

wherein the leg assembly is slidably movable with respect to the stanchion along at least a portion of the outer surface between the upper end and the lower end of the stanchion to adjust a vertical height of the upper end of the stanchion above a support surface when the leg assembly is rested on the support surface;

wherein the leg assembly includes a locking tab movable with the leg assembly along the stanchion;

wherein the outer surface of the stanchion defines at least one guide groove, the at least one guide groove extending along an axis that is oriented substantially parallel to a longitudinal axis of the stanchion, the locking tab of the leg assembly extending into the at least one guide groove such that sliding movement of the leg assembly with respect to the stanchion moves the locking tab in the at least one guide groove;

wherein the outer surface of the stanchion defines at least two positioning grooves, each of the at least two positioning grooves extending substantially perpendicular to the axis of the at least one guide groove;

wherein each of the at least two positioning grooves is in communication with the at least one guide groove such that the locking tab is movable from the guide groove into each of the positioning grooves to lock a position of the leg assembly with respect to the stanchion.

24. The firearm support of claim 23 wherein the locking tab must be moved out of all of the positioning grooves in order to slidably move the leg assembly along the stanchion.

* * * * *